Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A method for using a watermark to estimate a nature and/or an amount of processing that is applied to a signal, comprising the steps of:

embedding a watermark with a degree of redundancy into the signal to form a steganographic signal;

measuring a deterioration of the embedded watermark in the steganographic signal after the steganographic signal undergoes the processing, said deterioration of the embedded watermark being based on recovered data bits from a plurality of said redundantly embedded watermarks; and

estimating the nature and/or the amount of the processing based on the measured deterioration.

2. (Original) The method of claim 1, wherein:

said estimating step estimates an intrinsic fragility of the watermark by analyzing characteristics of the steganographic signal.

3. (Previously presented) The method of claim 1, comprising the further step of:

controlling an output of the steganographic signal when the amount of the estimated processing exceeds a threshold level.

4. (Original) The method of claim 1, wherein:

the nature and/or the amount of the estimated processing indicates whether the steganographic signal has undergone unauthorized processing.

5. (Original) The method of claim 1, wherein:

a user acquires the steganographic signal after it undergoes the processing; and

the nature and/or the amount of the estimated processing indicates whether the acquired steganographic signal closely matches the steganographic signal before it undergoes the processing.

6. (Original) The method of claim 5, comprising the further step of:

providing a message to the user indicating whether the acquired steganographic signal closely matches the steganographic signal before it underwent the processing.

7. (Original) The method of claim 1, wherein the processing that the steganographic signal undergoes comprises at least one of:

multi-generational copying;

perceptual compression and decompression;

digital-to-analog and analog-to-digital conversion;

resampling;

a bit depth reduction;

band-limiting;

dynamic range reduction; and

transmission over a communication channel.

8. (Original) The method of claim 1, wherein:

the deterioration of the embedded watermark is measured in accordance with a fragility profile of the embedded watermark.

9. (Original) The method of claim 8, wherein:

the fragility profile denotes a relationship between a bit error rate of the watermark and a signal to noise ratio of the steganographic signal.

10. (Original) The method of claim 1, wherein:

the watermark is embedded in the signal in accordance with a predicted sensitivity

of the signal that is based on a psychoacoustic analysis thereof.

11. (Original) The method of claim 1, wherein:

the steganographic signal further includes an embedded robust watermark that signals a receiver that the watermark with redundancy is present in the steganographic signal.

12. (Original) The method of claim 1, wherein:

the steganographic signal comprises at least one of audio and video content.

13. (Currently amended) A method for providing a signal with a watermark layer, comprising the steps of:

analyzing an intrinsic fragility of the signal, which is a carrier of the watermark layer; and

determining a fragility profile in response to said analyzing step;

wherein the fragility profile ~~is a model or a function that relates a degradation measure of the watermark layer to a degradation measure of the signal that carries the watermark~~ <u>denotes a relationship between a bit error rate of the watermark layer and a signal to noise ratio of the signal after the watermark layer and the signal are degraded</u>.

14. (Original) The method of claim 13, wherein the watermark layer is embedded into the signal to form a steganographic signal, comprising the further step of:

subjecting the steganographic signal to at least one processing step;

wherein the fragility profile denotes a deterioration of the embedded watermark layer due to said at least one processing stage.

15. (Original) The method of claim 13, wherein:

the intrinsic fragility analysis is applied to a cover portion of the signal before the signal is degraded by at least one processing step to indicate whether or not the watermark layer will survive the processing step.

16. (Original) The method of claim 15, comprising the further step of:

increasing a power of the watermark layer in the signal before the signal is degraded by the processing step if the intrinsic fragility analysis indicates that the watermark layer will not survive the processing step.

17. (Currently amended) The method of claim 13, wherein:

the intrinsic fragility analysis is applied to a cover portion of the signal to suggest eventual modifications of a configuration of a watermarking system used to provide the watermark layer to ensure a survival of the watermark layer through a specified processing stage.

18. (Original) The method of claim 13, wherein:

after the analyzing and determining steps, the signal, and data designating the fragility profile, are distributed to a decoder.

19. (Original) The method of claim 18, wherein:

the data designating the fragility profile is carried in the signal.

20. (Original) The method of claim 18, wherein:

the data designating the fragility profile is carried in the signal in another watermark layer.

21. (Cancelled).

22. (Previously presented) An apparatus for using a watermark to estimate a nature and/or an amount of processing that is applied to a signal, comprising:

means for embedding a watermark with a degree of redundancy into the signal to form a steganographic signal;

means for measuring a deterioration of the embedded watermark in the

steganographic signal after the steganographic signal undergoes the processing, said deterioration of the embedded watermark being based on recovered data bits from a plurality of said redundantly embedded watermarks; and

means for estimating the nature and/or the amount of the processing based on the measured deterioration.

23. (Currently amended) An apparatus for providing a signal with a watermark layer, comprising:

means for analyzing an intrinsic fragility of the signal, which is a carrier of the watermark layer; and

means for determining a fragility profile in response to said analyzing step;

wherein the fragility profile is a model or a function that relates a degradation measure of the watermark layer to a degradation measure of the signal that carries the watermark denotes a relationship between a bit error rate of the watermark layer and a signal to noise ratio of the signal after the watermark layer and the signal are degraded.